

CLAIMS:

1. An upper gearset support for the upper shaft and gear and clutch assembly of a marine transmission stern drive unit located in a housing having an upper and lower case, said support comprising:

- 5           (a) a generally axial body dimensioned to extend substantially the length of the upper case body defining an internal bore to receive the drive shaft, said body having an upper and a lower end, said upper end configured to receive the upper gearset and clutch assembly;
- (b) a first retainer located on said body;
- (c) a second retainer thereon spaced from said first retainer; and
- (d) and at least one of said retainers being adjustable relative to said body to secure said support in engagement with said housing.

2. The upper gearset support of Claim 1 further including a flange extending from said body.

3. The upper gearset support of Claim 1 wherein said flange defines at least one bore.

4. The upper gearset support of Claim 1 wherein said bore is threaded to receive a fastener.

5. The upper gearset support of Claim 1 wherein said body is fabricated from materials selected from the group consisting of 4140, 4130, 4340, 8640, or 300M.

6. The upper gearset support of Claim 1 wherein both said retainers are adjustable relative to said body.

7. The upper gearset support of Claim 1 wherein said at least one retainer being adjustable relative to said body is attached at mating threads and is axially adjustable therealong.

8. The upper gearset support of Claim 1 wherein the upper end of said bore defines a bearing receiving area.

9. The upper gearset support of Claim 1 wherein the upper end of said bore carries a bearing cup.

10. The upper gearset support of Claim 1 wherein said second retainer is located at the lower end of said body and has a surface configuration conforming to the peripheral surface area of the upper case which it engages.

11. A method of modifying a marine stern drive unit of the type having an upper and lower case in which is mounted an upper shaft and gear and clutch assembly which drives a propeller shaft, said method comprising:

(a) providing support having:

(i) a generally axial body dimensioned to extend substantially the length of the upper case, said body having an upper end and a lower end and

having a bore to receive the drive shaft, said upper end configured to receive the upper gearset and clutch assembly;

(ii) said body having first and second retainer thereon, at least one of said retainers being axially adjustable relative to said body;

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- (b) removing the drive shaft;
- (c) machining the upper case to accept the support;
- (d) installing the support and securing it to the upper case at said retainers;
- (e) installing the drive shaft, bearing, clutch and gear assembly and connecting them to the propeller shaft; and
- (f) replacing the top cover on the upper case.

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